

REMARKS

Reconsideration of this application is respectfully requested in view of the foregoing amendment and the following remarks.

Claims 1-14 were pending in this application. Claim 2 has been cancelled, without prejudice or disclaimer, and claims 1, 3-6, 10, and 12 have been amended. Accordingly, claims 1 and 3-14 will be pending herein upon entry of this Amendment. Support for the amendment to each of the claims can be found in the specification of the present application. For the reasons stated below, Applicant respectfully submits that all claims pending in this application are in condition for allowance.

In the Office Action mailed July 31, 2003, claims 6, and 8-14 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 6,075,814 to Yamano et al. ("Yamano"); claims 1-5 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 6,426,961 to Nimmagadda ("Nimmagadda") in view of Yamano; and claim 7 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamano in view of U.S. Patent 6,353,638 to Wallace et al. ("Wallace"). The Examiner is thanked for the thorough review and examination of the application.

In response to the Office Action, Applicants have amended claims 1, 3-6, 10 and 12. Each of the independent claims 1, 5, 6, 10, and 12 has been amended to make it clear that only a signal detector is operative to detect a pilot tone and that the remaining parts or components of a high-bit-rate transmission device are operated, or turned on, after detection of the pilot tone.

Applicants submit that independent claims 1, 5, 6, 10, and 12 are distinct from Nimmagadda, Yamano, and Wallace, taken singly or in combination.

Claims 1 and 5 are directed respectively to a method and system in which only a signal tone detector detects an occurrence of a pilot tone in an upstream or downstream channel and a “number of first parts” are operated only when the signal tone detector detects the occurrence of the pilot tone in the upstream or downstream channel.

Yamano does not disclose “operating only a signal tone detector to detect an occurrence of a pilot tone in an upstream or downstream channel indicating a beginning of a data transmission” and “operating remaining parts of the high-bit-rate data transmission devices only when the signal tone detector detects the occurrence of the pilot tone in the upstream or downstream channel,” as in claim 1. Instead, Yamano discloses that several components are operated in a reduced state. For example, “[t]o further reduce the processing requirements of receiver circuit 300 during the standby mode, equalizer 303, carrier recovery circuit 304, timing update circuit 310 and echo canceler 309 can be operated in a reduced precision processing mode while receiver circuit 300 is operating in standby mode.” See col. 9, lines 44-49

Furthermore, in another disclosed arrangement, a receiver circuit 400 includes an **A/D converter 301**, resampler 302, equalizer 303, carrier recovery circuit 304, symbol decision circuit 305, channel decoder 306, framer/idle detector 307, **sampler buffer 308**, echo canceler 309, timing update circuit 310, equalizer update circuit 311, carrier update circuit 312, packet queue 318, and a non-idle detector circuit 401. See col. 14, lines 3-12. When the non-idle detector 401 detects an absence of an easily detected signal, the receiver circuit 400 enters a

reduced processing mode where the resampler 302, equalizer 303, carrier recovery circuit 304, symbol decision circuit 305, channel decoder 306, framer/idle detector 307, echo canceler 309, timing update circuit 310, equalizer update circuit 311, carrier update circuit 312, packet queue 318 are disabled by the non-idle detector 401. See col. 14, lines 33-40. Clearly, the A/D converter 301 and sampler buffer 308 are not disabled.

Therefore, Yamano fails to teach or suggest operating only a signal tone detector to detect an occurrence of a pilot tone in an upstream or downstream channel indicating a beginning of a data transmission and operating remaining parts of the high-bit-rate data transmission devices only when the signal tone detector detects the occurrence of the pilot tone in the upstream or downstream channel, because the A/D converter and sampler buffer 308 are not disabled. Similarly, claim 5 recites “a signal tone detector configured to detect an occurrence of a pilot tone in an upstream or downstream channel and the number of first parts are operated only when the signal tone detector detects the occurrence of the pilot tone in the upstream or downstream channel.”

Claims 6 and 10 are directed to a method and system, respectively, in which a signal tone detector detects an occurrence of a pilot tone in an upstream or downstream channel and remaining parts of the high-bit-rate transmission device are operated only when the signal tone detector detects the occurrence of the pilot tone in the upstream or downstream channel.

Claim 12 is directed to a high-bit-rate transmission device including a signaling tone detector, a plurality of components for performing data transmission, and “the plurality of components of the high-bit-rate transmission device are switched into an operative state only

Serial No.: 09/484,650
Art Unit: 2697

Attorney's Docket No.: SIE-110
Page 12

when the pilot tone is detected." As described above, at best, Yamano discloses a circuit operated in a reduced processing state, whereas the claims of the present application require that the remaining parts of the high-bit-rate transmission device are not in an operative state until the signaling tone detector detects a pilot tone.

Therefore, Yamano fails to teach or suggest the claimed invention. Moreover, neither Nimmagadda, nor Wallace, taken singly or in combination teach or suggest the claimed invention.

Claims 3, 4, 7-9, 11, 13, and 14 depend from one of independent claim 1, 6, 10, and 12 and are allowable for at least the same reasons as the independent claims from which they depend as well as for their independently recited subject matter.

In view of the foregoing all of the claims in this case are believed to be in condition for allowance. Should the Examiner have any questions or determine that any further action is desirable to place this application in even better condition for issue, the Examiner is encouraged to telephone applicants' undersigned representative at the number listed below.

SHAW PITTMAN LLP
1650 Tysons Boulevard
McLean, VA 22102
Tel: 703/770-7900

Date: October 28, 2003

Respectfully submitted,

By:



Michael A. Oblon
Registration No. 42,956

MAO/CDW

Customer No. 28970